Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Claim 1. (currently amended) A continuous steel casting method **[[,]]**

comprising feeding molten steel into a mold, whereby solidification of the molten steel proceeds, and

~~wherein while~~ controlling a flow of unsolidified molten steel in the mold by applying a vibrating magnetic field which is generated with an arrangement of at least three electromagnets disposed along a longitudinal direction of **[[a]]** the mold ~~for continuous casting~~, peak positions of the vibrating magnetic field are shifted along the longitudinal direction, wherein the longitudinal direction of the mold is a direction along the wide face of the mold,

wherein the vibrating magnetic field comprises a magnetic field in which the direction of an electromagnetic force acting on the molten steel between a pair of two adjacent electromagnets

is substantially opposite to that of the electromagnetic force acting on the molten steel between the adjacent pair of electromagnets.

Claim 2. (currently amended) The continuous steel casting method according to Claim 1, wherein the arrangement of at least three electromagnets has a part where coil phases of three adjacent electromagnets are in the order of [[n, 2n,]] ~~and n or~~ n, 3n [[,]] and 2n, or a part where coil phases of four adjacent electromagnets are in the order of 0, n, 2n and n.

Claim 3. (previously presented) The continuous steel casting method according to Claim 1, wherein a direct-current magnetic field is superimposed on the vibrating magnetic field in a thickness direction of a cast slab.

Claim 4. (canceled)

Claim 5. (currently amended) The continuous steel casting method according to Claim [[4]] 1, wherein the molten steel is an

ultra low carbon steel deoxidized by Ti having a composition containing: C $\leq$ 0.020% by mass, Si $\leq$ 0.2% by mass, Mn $\leq$ 1.0% by mass, S $\leq$ 0.050% by mass[[,]] and Ti $\leq$ 0.010% by mass, and satisfying the relationship Al $\leq$ Ti/5 on a content basis of percent by mass.

Claim 6. (currently amended) The continuous steel casting method according to Claim [[5]] 1, wherein the molten steel is decarburized with a vacuum degassing apparatus, subsequently deoxidized with a Ti-containing alloy, and then an alloy for controlling the composition of inclusions is added to the molten steel, wherein the alloy contains at least one metal selected from among 10% by mass or more of Ca and 5% by mass or more of rare earth metals and at least one element selected from the group consisting of Fe, Al, Si[[,]] and Ti, wherein the resulting oxide in molten steel contains 10% to 50% by mass of at least one oxide selected from the ~~groups~~ group consisting of CaO and an REM ~~oxides~~ oxide, 90% by mass or less of Ti oxide, and 70% by mass or less of Al_2O_3.

Claim 7. (original) The continuous steel casting method according to Claim 6, wherein the molten steel after the decarburization is pre-deoxidized with Al, Si, or Mn so that the concentration of dissolved oxygen in the molten steel is 200 ppm or less, before the deoxidation with the Ti-containing alloy.

Claim 8. (previously presented) The continuous steel casting method according to claim 1, wherein a maximum value of Lorentz forces induced by the vibrating magnetic field is in the range of 5,000 N/m^3 or more and 13,000 N/m^3 or less.

Claim 9. (previously presented) The continuous steel casting method according to claim 1, wherein a flow rate V (m/s) of the unsolidified molten steel in the mold for continuous casting and a maximum value F_{max} (N/m^3) of Lorentz forces induced by the vibrating magnetic field are adjusted so that V x F_{max} is 3,000 $N/(s \cdot m^2)$ or more.

Claim 10. (previously presented) The continuous steel casting method according to Claim 2, wherein a direct-current

magnetic field is superimposed on the vibrating magnetic field in a thickness direction of a cast slab.

Claim 11. (currently amended) The continuous steel casting method according to Claim 10, wherein ~~the melting points of inclusions in unsolidified molten steel in the mold is reduced so that a nozzle from which the molten steel is fed is prevented from being clogged[[,]] whereby continuous casting is performed without blowing an inert gas from the nozzle~~ the molten steel is an ultra low carbon steel deoxidized by Ti having a composition containing: C≤ 0.020% by mass, Si ≤ 0.2% by mass, Mn ≤ 1.0% by mass, S ≤ 0.050% by mass and Ti ≤ 0.010% by mass, and satisfying the relationship Al ≤ Ti/5 on a content basis of percent by mass.

Claim 12. (currently amended) The continuous steel casting method according to Claim 2, wherein ~~the melting points of inclusions in unsolidified molten steel in the mold is reduced so that a nozzle from which the molten steel is fed is prevented from being clogged [[,]] whereby continuous casting is performed without blowing an inert gas from the nozzle~~ the molten steel is decarburized with a vacuum degassing apparatus, subsequently

deoxidized with a Ti-containing alloy, and then an alloy for controlling the composition of inclusions is added to the molten steel; wherein the alloy contains at least one metal selected from the group consisting of 10% by mass or more of Ca and 5% by mass or more of a rare earth metal and at least one element selected from the group consisting of Fe, Al, Si and Ti, and wherein the resulting oxide in the molten steel contains 10% to 50% by mass of at least one oxide selected from the group consisting of CaO and an REM oxide, 90% by mass or less of a Ti oxide, and 70% by mass or less of Al_2O_3.

Claim 13. (currently amended) The continuous steel casting method according to Claim 3, wherein ~~the melting points of inclusions in unsolidified molten steel in the mold is reduced so that a nozzle from which the molten steel is fed is prevented from being clogged~~ **[[,]]** ~~whereby continuous casting is performed without blowing an inert gas from the nozzle~~ the molten steel is decarburized with a vacuum degassing apparatus, subsequently deoxidized with a Ti-containing alloy, and then an alloy for controlling the composition of inclusions is added to the molten

steel; wherein the alloy contains at least one metal selected from the group consisting of 10% by mass or more of Ca and 5% by mass or more of a rare earth metal and at least one element selected from the group consisting of Fe, Al, Si and Ti, and wherein the resulting oxide in the molten steel contains 10% to 50% by mass of at least one oxide selected from the group consisting of CaO and an REM oxide, 90% by mass or less of a Ti oxide, and 70% by mass or less of Al_2O_3.

Claim 14. (currently amended) The continuous steel casting method according to Claim **[[**12**]]** 2, wherein the molten steel is an ultra low carbon steel deoxidized by Ti having a composition containing: C $\leq$ 0.020% by mass, Mn $\leq$ 1.0% by mass, S $\leq$ 0.050% by mass, and Ti $\geq$ 0.010% by mass, and satisfying the relationship Al $\leq$ Ti/5 on a content basis of percent by mass.

Claim 15. (currently amended) The continuous steel casting method according to Claim **[[**13**]]** 3, wherein the molten steel is an ultra low carbon steel deoxidized by Ti having a composition containing: C $\leq$ 0.020% by mass, Mn $\leq$ 1.0% by mass, S $\leq$ 0.050% by

mass, and Ti $\geq$ 0.010% by mass, and satisfying the relationship Al $\leq$ Ti/5 on a content basis of percent by mass.

Claim 16. (previously presented) The continuous steel casting method according to Claim 14, wherein the molten steel is decarburized with a vacuum degassing apparatus, subsequently deoxidized with a Ti-containing alloy, and then an alloy for controlling the composition of inclusions is added to the molten steel, wherein the alloy contains at least one metal selected from among 10% by mass or more of Ca and 5% by mass or more of rare earth metals and at least one element selected from the group consisting of Fe, Al, Si, and Ti, and wherein the resulting oxide in molten steel contains 10% to 50% by mass of at least one selected from the groups consisting of CaO and REM oxides, 90% by mass or less of Ti oxide, and 70% by mass or less of Al_2O_3.

Claim 17. (previously presented) The continuous steel casting method according to Claim 15, wherein the molten steel is decarburized with a vacuum degassing apparatus, subsequently deoxidized with a Ti-containing alloy, and then an alloy for controlling the composition of inclusions is added to the molten

steel, wherein the alloy contains at least one metal selected from among 10% by mass or more of Ca and 5% by mass or more of rare earth metals and at least one element selected from the group consisting of Fe, Al, Si, and Ti, and wherein the resulting oxide in molten steel contains 10% to 50% by mass of at least one selected from the groups consisting of CaO and REM oxides, 90% by mass or less of Ti oxide, and 70% by mass or less of Al_2O_3.

Claim 18. (previously presented) The continuous steel casting method according to Claim 16, wherein the molten steel after the decarburization is pre-deoxidized with Al, Si, or Mn so that the concentration of dissolved oxygen n the molten steel is 200 ppm or less, before the deoxidation with the Ti-containing alloy.

Claim 19. (previously presented) The continuous steel casting method according to Claim 17, wherein the molten steel after the decarburization is pre-deoxidized with Al, Si, or Mn so that the concentration of dissolved oxygen in the molten steel is 200 ppm or less, before the deoxidation with the Ti-containing alloy.

Claim 20. (previously presented) The continuous steel casting method according to Claim 2, wherein a maximum value of Lorentz forces induced by the vibrating magnetic field is in the range of 5,000 N/m^3 or more and 13,000 N/m^3 or less.

Claim 21. (previously presented) The continuous steel casting method according to Claim 3, wherein a maximum value of Lorentz forces induced by the vibrating magnetic field is in the range of 5,000 N/m^3 or more and 13,000 N/m^3 or less.

Claim 22. (currently amended) The continuous steel casting method according to Claim **[[4]]** 6, wherein a maximum value of Lorentz forces induced by the vibrating magnetic field is in the range of 5,000 N/m^3 or more and 13,000 N/m^3 or less.

Claim 23. (previously presented) The continuous steel casting method according to Claim 5, wherein a maximum value of Lorentz forces induced by the vibrating magnetic field is in the range of 5,000 N/m^3 or more and 13,000 N/m^3 or less.

Claim 24. (previously presented) The continuous steel casting method according to Claim 2, wherein a flow rate V (m/s) of the unsolidified molten steel in the mold for continuous casting and a maximum value F_{max} (N/m^3) of Lorentz forces induced by the vibrating magnetic field are adjusted so that V x F_{max} is 3,000 $N/(s \cdot m^2)$ or more.

Claim 25. (previously presented) The continuous steel casting method according to Claim 3, wherein a flow rate V (ms) of the unsolidified molten steel in the mold for continuous casting and a maximum value F_{max} (N/m^3) of Lorentz forces induced by the vibrating magnetic field are adjusted so that V x F_{max} is 3,000 $N/(s \cdot m^2)$ or more.

Claim 26. (currently amended) The continuous steel casting method according to Claim **[[4]]** 6, wherein a flow rate V (m/s) of the unsolidified molten steel in the mold for continuous casting a maximum value F_{max} (N/m^3) of Lorentz forces induced by the vibrating magnetic field are adjusted so that V x F_{max} is 3,000 $N/(s \cdot m^2)$ or more.

Claim 27. (previously presented) The continuous steel casting method according to Claim 5, wherein a flow rate V (m/s) of the unsolidified molten steel in the mold for continuous casting and a maximum value F_{max} (N/m^3) of Lorentz forces induced by the vibrating magnetic field are adjusted so that V x F_{max} is 3,000 $N/(s \cdot m^2)$ or more.